



Office cum Storage Building of the Directorate of Census Operations (DCO)

Location	: Guwahati, Assam
Site Area	: 4,015.00 m ²
Built up Area	: 2,408.00 m ²
Typology	: Commercial
SVAGRIHA Rating	: 3 Star Rating
Year of completion	: 2021

The following strategies were adopted to reduce building impact on the natural environment:

📍 **Landscape:**

- 47 new native trees have been planted on site.

📍 **Architecture & Energy:**

- 66.03% of the total living area is day-lit.
- LPD of the project is 4.39 W/m², which is lower than the ECBC specified limit of 10.80 W/m² for office buildings.
- Thermal efficiency of the building envelope is 354.34 sq.ft/TR, which is higher than the final benchmark of 325 sq.ft/TR.

📍 **Water and Waste:**

- Reduction of 73.92% from the SVAGRIHA base case has been demonstrated in the landscape water demand.
- Rain water storage tank of capacity 5,500 litres has been constructed on site.
- STP of MBBR technology of 20 kLD capacity has been installed in the project.

📍 **Sustainable Building Materials:**

- Fly ash bricks for walling in the project.
- PSC (Portland Slag Cement) with slag replacing 48% cement by weight has been used in plaster and masonry mortar.
- Low VOC paints, adhesives & sealants have been used in the project.

📍 **Sustainable Building Materials:**

- PPC has been used for 100% structural concrete, masonry mortar and plaster.
- Low VOC and lead free paints have been used to maintain good indoor air quality.
- Reduction of 56.44% from the SVAGRIHA base case has been demonstrated in embodied energy by using AAC blocks for constructing external and internal walls

📍 **Lifestyle:**

- Dedicated resting room and toilets have been provided for service staff working in the building.
- Basic amenities such as grocery store, ATM/Bank, pharmacy, restaurant, community center, metro station are located within walkable distance from the site.
- Environmental awareness signage's have been displayed at various locations.
- Electric charging points have been provided to encourage the use of electric vehicles and reduce carbon emission.

Integrated Design Team:

Client	: Directorate of Census Operations, Assam
Principal Architect	: Munish Verma and Associates
Green Building Consultant	: I-NAT Studio LLP